# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	
	)
Request by New EA, Inc. dba Flow Mobile	)
for Waiver of the Commission's Rules to	) PS Docket No. 06-229
deploy a 700 MHz Public Safety Interoperable	)
Broadband Network That Can Be Integrated	)
into the Public-Private Partnership	)

WAIVER—EXPEDITED ACTION REQUESTED

Respectfully submitted by SREE TANGELLA New EA, Inc. dba Flow Mobile

Date: July 7, 2009

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#### I. SUMMARY OF REQUEST

Pursuant to Section 1.925(b) of the rules of the Federal Communications Commission ("FCC" or "Commission"), <sup>1</sup> New EA, Inc. dba Flow Mobile ("Flow Mobile") respectfully requests a waiver of the Commission's rules to enable it to deploy a statewide, 4G-like, interoperable wireless broadband public safety network in the 700 MHz public safety allocation in North Dakota. Flow Mobile's proposed network will provide the public safety community of North Dakota access to an advanced mobile broadband network that will enhance the safety and security of the citizens of North Dakota. Flow Mobile has worked closely with the public safety agencies and organizations of North Dakota to develop a viable plan to deploy and operate a network that address many pressing needs for public safety communications for the state of North Dakota. This waiver request seeks waivers from the Commission that would allow Flow Mobile to utilize the narrow band 769 - 775 MHz licensed to the state of North Dakota as well as the 763 - 768 MHz and 793-798 MHz band licensed to the Public Safety Spectrum Trust (PSST)

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<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 1.925(b)

both of which remain fallow at this point in time – to deploy an interoperable emergency
 communications and joint use network providing mobile broadband services that would be based
 using open standards and compatible with LTE and other 700 MHz standards.

#### II. INTRODUCTION

#### A. THE STATE OF NORTH DAKOTA

Flow Mobile is a Bismarck, North Dakota company that was created with a focused mission to serve rural communities. Flow Mobile believes that rural America deserves to be first to receive next generation communications services, and the company is committed to deploying advanced mobile broadband communications networks that address the needs of public safety as well as providing all rural residents with an affordable mobile broadband service. Specifically, Flow Mobile intends to introduce a game changing technology first in rural America that has the ability to carry high-speed multiple forms of traffic in a mobile environment, provide a low-cost technology with an easy migration path between unlicensed and licensed, and utilize an open standards approach.

The lack of wireless coverage in rural states provides consumers and public safety with few choices for broadband providers. North Dakota, a rural state with a population of only 642,200,<sup>2</sup> has only 292,054 high-speed lines.<sup>3</sup> The few incumbent providers who do offer service do not reach all residents of North Dakota and have been unable to partner with the public safety

<sup>&</sup>lt;sup>2</sup> U.S Decennial Census of 2000, North Dakota. Available at:

http://factfinder.census.gov/servlet/SAFFFacts?\_event=&geo\_id=04000US38&\_geoContext=01000US|04000US38 &\_street=&\_county=&\_cityTown=&\_state=04000US38&\_zip=&\_lang=en&\_sse=on&ActiveGeoDiv=&\_useEV=& pctxt=fph&pgsl=040&\_submenuId=factsheet\_1&ds\_name=ACS\_2007\_3YR\_SAFF&\_ci\_nbr=null&qr\_name=null&reg=null%3Anull&\_keyword=&\_industry= (last viewed June 10, 2009).

<sup>&</sup>lt;sup>3</sup> Report on High-Speed Services for Internet Access: Status as of December 31, 2007, Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, January 2009 at Table 9.

sector to provide a high-quality, first rate interoperable network. North Dakota has less than 9 people per square mile, making it the 2<sup>nd</sup> least populated state in the Union. Providing ubiquitous mobile broadband coverage in North Dakota poses a significant challenge. Justifying the costs of a proprietary network for the less than 5,000 public safety emergency responders is untenable. Further, the commercial mobile wireless networks in the state are continually plagued with many coverage gaps that are "dead zones". Too often North Dakota residents have suffered the inability to call 9-1-1 because of coverage gaps.<sup>4</sup>

#### B. UNPREDICTABLE AND UNCERTAIN FUTURE OF THE D-BLOCK

Flow Mobile is prepared to immediately deploy a mobile broadband network that will provide North Dakota emergency response agencies and personnel access to 4G-like mobile communications services. The uncertainty surrounding the D-Block auction imposes a significant delay in the ability of North Dakota first responders and its citizens to enjoy the benefits of the broadband emergency communications network that Flow Mobile is prepared to deploy. Without a waiver, Flow Mobile would be delayed in deploying this network and provide a much- needed public safety communications system to the residents of North Dakota. Given the outcome of the 700 MHz auction and the need to re-auction the D-Block, the uncertainty surrounding the future of public safety and the D-Block, North Dakotans cannot afford to wait any longer. With more than a year and a half passed since Auction 73, uncertainty is the major obstacle to deploying a statewide, interoperable public safety broadband network.

<sup>&</sup>lt;sup>4</sup> "Hunting Accident Injures Boy from Fargo," Grand Forks Herald, October 10, 2005, 02 B.

This delay has occurred even after Congress first designated this spectrum for public safety use more than 12 years ago.<sup>5</sup>

As shown below, the requested waiver will serve the public interest by improving both emergency communication service for first responders and providing commercial and residential services without sacrificing of the policy goals the Commission sought to achieve in its 700 MHz rulemaking.<sup>6</sup> Flow Mobile requests that the Commission act quickly on this waiver so first responders can better serve the citizens of North Dakota through the deployment of a mobile broadband network.

#### III. FLOW MOBILE IS READY TO OFFER A STATEWIDE, 4G-LIKE, INTEROPERABLE, PUBLIC SAFETY NETWORK IN NORTH DAKOTA

Flow Mobile seeks permission in two areas to deploy and operate a statewide, interoperable, dual use, public safety network to use 700 MHz base stations operating in the:

- 763-768 MHz and 793-798 MHz range, of which 10 MHz licensed to the PSST and
- o 769 775 MHz in the narrowband licensed to the state of North Dakota.

Flow Mobile's platform will offer wireless high-speed data and video applications not currently available in North Dakota. The Flow Mobile solution is cost-effective, not requiring any capital investment by the state, only operational costs. The technology, employing a base transceiver station ("BTS") standard protocol approach, provides better coverage than EVDO

<sup>&</sup>lt;sup>5</sup> Balanced Budget Act of 1997, 111 STAT. 251, Public Law 105-33.

<sup>&</sup>lt;sup>6</sup> See Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Second Report and Order, FCC Rcd 15289 (2007).

service at a lower cost and fosters migration towards next generation 9-1-1 services. The proposed statewide network would meet the technical specifications proposed for a public safety commercial network and be capable of integration into any shared dual use network. Flow Mobile has specifically designed a network with the ability to accommodate all technologies, including LTE as advocated by NENA and APCO<sup>7</sup>, and to adapt to any Commission mandate.

On behalf of the State, the North Dakota Department of Emergency Services has granted Flow Mobile permission to use the narrowband 700 MHz public safety frequencies licensed to the State for early build out. Further, the State supports this waiver request to not only use the North Dakota public safety frequencies as well as the PSST licensed frequencies. In addition, the Governor of North Dakota has expressed his support for the network, stating that that "the State of North Dakota would benefit from a statewide mobile broadband emergency communications network that would be accessible to first responders and other public safety personnel and organizations." The Governor's letter confirms that Flow Mobile's network would be compatible with the Public Safety Spectrum Trust's (PSST) planned network. The Governor has coordinated efforts with the Information Technology Department, Division of Homeland Security, Division of State Radio Communications, the Highway Patrol, the Criminal Justice Information Sharing System, and the Department of Transportation. North Dakota has taken steps to improve its own emergency communications system by pledging its support for

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<sup>&</sup>lt;sup>7</sup> Comments of APCO, GN Docket No. 09-51 (filed June 8, 2009) at 2; See also Comments of NENA, GN Docket No. 09-51 (filed June 8, 2009) at 8 (urging the Commission to ensure that any Commission action result in "a single standard and technology platform consistent for all users of the 700 MHz band"). See also APCO & NENA Endorse LTE as Technology Standard for the Development of a Nationwide Broadband Network, Press Release, June 9, 2009. Available at: http://www.apco911.org/new/news/nena\_endorse\_lte.php

<sup>&</sup>lt;sup>8</sup> Memorandum of Understanding between North Dakota Department of Emergency Services and Flow Mobile, July, 2009.

<sup>&</sup>lt;sup>9</sup> Letter from Governor John Hoeven to Bill Owens, Chairman of New EA, dba Flow Mobile, February 9. 2009.

Flow Mobile, as the State can no longer afford to wait for the Commission to auction off the D-Block. In addition, the Flow Mobile plan has gained the support of the North and South Dakota chapters of NENA.<sup>10</sup>

## IV. FLOW MOBILE SUPPORTS THE PETITIONS FILED BY THE STATE OF NEW JERSEY, THE CITY OF BOSTON, AND THE CITY AND COUNTY OF SAN FRANCISCO

Flow Mobile supports the initiative of the State of New Jersey, the City of Boston, and the City and County of San Francisco to seek early deployment of an interoperable public safety network in their respective communities in the 700 MHz band and supports their efforts requesting approval for early network build-out. <sup>11</sup> These petitions illustrate that Flow Mobile is not the only entity working to deploy an interoperable public safety network in advance of a D-Block auction and urges the Commission to act favorable on all waivers to meet the needs of communities' needs for improved and advanced emergency communications. Public safety needs cannot afford to continue to await delays and indecision by the Commission and we urge the Commission to allow communities that are prepared to move forward to utilize fallow spectrum to address the needs of their communities, provided that such early deployment is done in a manner that will accommodate a national network that may be developed later.

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<sup>&</sup>lt;sup>10</sup> February 20, 2009 letter from North and South Dakota NENA presidents to Bill Owens.

<sup>&</sup>lt;sup>11</sup> Petition by the State of New Jersey on the Commission's Rules Regarding a 700 MHz Nationwide Public Safety Interoperable Broadband Network, PS Docket No. 06-229, filed Apr. 3, 2009; Request by the City of Boston for Waiver of the Commission's Rules to Deploy a 700 MHz Public Safety Interoperable Broadband Network That Can Be Integrated into the Public-Private Partnership, PS Docket No. 06-229, filed Dec. 11, 2008; Request by the City and County of San Francisco, City of Oakland and City of San Jose for Waiver of the Commission's Rules to Allow Establishment of a 700 MHz Interoperable Mobile Public Safety Broadband Network, PS Docket No. 06-229, filed Mar. 24, 2009.

V. **CONCLUSION** 

For the reasons outlined above, Flow Mobile requests Commission approval allowing

Flow Mobile to deploy a statewide, 4G-like, interoperable wireless network for both public

safety and commercial use. As no other operator has been able to provide such service to date

and with uncertainty surrounding Commission rules on the D Block, Flow Mobile urges the

Commission to allow the residents of North Dakota this long overdue and much needed public

service.

DATED: July 7, 2009

Respectfully submitted,

/s/ Sree Tangella

SREE TANGELLA

New EA, Inc. dba Flow Mobile

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### **ND Department of Emergency Services**

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"Ensuring a safe and secure homeland for all North Dakotans"

# MEMORANDUM OF AGREEMENT BETWEEN NORTH DAKOTA DIVISION OF STATE RADIO AND FLOW MOBILE

SUBJECT: Memorandum of Agreement for Operating in the North Dakota Licensed 700 MHz Spectrum

- This memorandum of agreement is for the authorization to use North Dakota Licensed Frequency 769.0000 – 775.0000 MHz. By virtue of signing this MOA, Flow Mobile affirms its willingness to comply with the proper operation of the Interoperability (interoperability) channels as dictated by the State Interoperability Executive Committee (SIEC) as approved by the Federal Communications Commission (FCC) and by the conditions of this MOA.
- 2. The purpose of this MOA is to allow for Flow Mobile to conduct its build-out or otherwise conduct the implementation of the infrastructure required for system operation; North Dakota agrees not to charge Flow Mobile for its use of said frequencies and Flow Mobile agrees not to use this MOA for profit. Prior to Flow Mobile using state frequencies for profit, negotiations will immediately take place between Flow Mobile and the State of North Dakota regarding Flow Mobile compensating the State of North Dakota for the use of its frequencies. If an agreement is not reached this MOA will immediately cease.
- 3. Flow Mobile shall abide by the conditions of this MOA which are as follows:
  - a. To operate by all applicable Federal, State, County and City laws/ordinances.
  - b. To utilize "plain language" for all transmissions.
  - c. To monitor the Calling Channel(s) and coordinate the use of the Tactical Channels.
  - d. To identify inappropriate use and mitigate the same from occurring in the future
  - e. To mitigate contention for channels by exercising the Priority Levels identified in this MOA.
  - f. To follow all waivers/conditions in the state of ND frequency license.

4. The preceding conditions are the primary, though not complete, requirements for operating in the interoperability channels.

#### a. Priority Levels:

- 1) Disaster or extreme emergency operation for mutual aid and interagency communications;
- 2) Emergency or urgent operation involving imminent danger to life or
- 3) Special event control, generally of a preplanned nature (including Public Safety Task Force operations);
- 4) Single agency secondary communications (default priority).
- 5. To resolve contention within the same priority, the channel should go to the organization with the wider span of control/authority. This shall be determined by the State Interoperability Executive Committee for the operation or by the levels of authority/government identified in the contention.
- 6. For clarification purposes and an aid to operate as authorized, any fixed base or mobile relay stations identified on the license for temporary locations (FCC stations class FBT or FB2T, respectively) shall remain within the licensed area of operation. Similarly, vehicular/mobile repeater stations (FCC station class MO3) shall remain within the licensed area of operation. Federal agencies are permitted access to interoperability channels only as authorized by 47 CFR 2.102(c) and 2.103 and Part 7.12 of the NTIA Manual.
- 7. Any violation of this MOA, the ND Statewide Communications and Interoperability Plan, or FCC Rule shall be addressed immediately. The first level of resolution shall be between the parties involved, next the State Interoperability Executive Committee, and finally the FCC.
- North Dakota State Radio and Flow Mobile each agrees to assume its own liability for any and all claims of any nature including all costs, expenses and attorneys' fees which may in any manner result form or arise out of this MOA.
- 9. The State of North Dakota, through the Division of State Radio, supports Flow Mobile's plan to utilize the Public Safety Spectrum currently licensed by the FCC to the PSST and unlicensed spectrum for a North Dakota based public safety project.
- 10. This MOA is in effect as of July 1, 2009 and will expire January 31, 2011.
- 11. If the terms of the MOA are violated, either party may terminate the MOA immediately upon written notice to the other party.

Given under our hands on the dates set forth:

DAVID A. SPRYNCZYNAZYK Major General, ND National Guard The Director of the Department of

Emergency Services



February 9, 2009

Bill Owens Chairman of the Board New EA, Inc. 1915 North Kavaney Drive Bismarck, ND 58503

RE: Public Safety Communications Project

Dear Mr. Owens:

We are pleased to have New EA, Inc. serving communities in North Dakota with wireless mobile broadband access using wireless technologies. I understand that New EA intends to provide Fourth Generation or "4G" mobile services, using a combination of unlicensed and licensed 700 MHz spectrum, for public safety and commercial use in rural areas.

The State of North Dakota would benefit from a state-wide mobile broadband emergency communications network that would be accessible to first responders and other public safety personnel and organizations. In the interest of promoting public safety in North Dakota, I have a strong interest in the products and technology being developed by New EA, Inc.

According to officials within North Dakota's Information Technology Department, Department of Emergency Services and Highway Patrol, New EA's proposed pilot network would be compatible with the national 700 MHz public safety network envisioned by the federal Public Safety Spectrum Trust (PSST) and could enable public safety personnel and organizations in North Dakota to utilize a broad range of applications made possible over a "4G" network that will enhance emergency response and public safety in general.

I support New EA plans to utilize the Public Safety Spectrum (763-768/793-798 MHz) currently licensed by the FCC to the PSST and unlicensed spectrum for a North Dakota based public safety project.

Bill Owens February 9, 2009 Page 2

It is important that like the PSST vision, this network will be utilized for both public safety as well as for commercial use, with priority access for public safety. The network will provide: broadband access speeds at 1 mbps through the coverage area, voice coverage throughout the landmass, ad-hoc video casting capabilities from the location back to a central office and fixed surveillance capabilities and vehicle tracking.

As their respective operating budgets allow, several State of North Dakota public safety agencies will participate in the project. These departments may include, but are not limited to: the Information Technology Department, the Division of Homeland Security, the Division of State Radio Communications, the Highway Patrol, Criminal Justice Information Sharing System and the Department of Transportation.

To assist New EA in their effort to comply with the requirements of the national 700 MHz public safety network, the State will, where possible and practical, help identify potential locations for the New EA Base Stations on state-owned towers or poles as well as may provide the electricity and power and coordinate on right-of-way access.

We are hopeful that upon successful demonstration of this project in North Dakota, followed by statewide implementation, that New EA can deliver the technology and products to other western states. This could enhance interoperability with regional states and thereby foster greater emergency response capabilities in North Dakota and other rural states.

This letter is written as a statement of interest and offer of cooperation and should not be construed to bind the state or any parties of the state, nor New EA to any terms. Rather, my intent is to express our interest to continue discussions to develop a public safety demonstration with state agencies as a possible customer using newly available tools and frequencies. It is important that we continue to provide the opportunity to enhance public safety and communications and I support efforts by New EA Inc. to establish a public safety project in North Dakota.

Sincerely,

John Hoeven

38:47:56

## The Dakota Chapter of NENA



February 20, 2009

Bill Owens Chairman of the Board New EA, Inc. 1915 North Kavaney Drive Bismarck, ND 58503

RE: Public Safety Communications Project

Dear Mr. Owens:

We are pleased to hear that New EA intends to serve rural America with wireless mobile broadband access using wireless technologies. Providing Fourth Generation or "4G" mobile services, using a combination of unlicensed and licensed 700 MHz spectrum, for public safety and commercial use in rural areas is something we would be extremely supportive of. As we all know, public safety enhancements that create efficient and effective response times is critical to the citizens we serve.

Public safety would benefit from a state/region-wide mobile broadband emergency communications network that would be accessible to a broad range of first responders and other public safety personnel and organizations. In the interest of promoting public safety in our rural states and communities, we have a strong interest in the products, networks, and technology being developed by New EA, Inc.

The network described would be compatible with the national 700 MHz public safety network envisioned by the federal Public Safety Spectrum Trust (PSST) and could enable public safety personnel and organizations in rural states to utilize a broad range of applications made possible over a "4G" network that will enhance emergency response and public safety in general.

We also understand that like the PSST vision, this network will be utilized for both public safety as well as for commercial use, with **priority access for public safety use.** The network will provide: broadband access speeds at 1 mbps through the coverage area, voice coverage throughout the landmass, ad-hoc Video casting capabilities from the location back to a central office and fixed surveillance capabilities and vehicle tracking.

We understand that New EA has secured a Letter of Interest from the State of North Dakota to move forward with the "4G" project. We also understand that several departments within the State of North Dakota intend on participating in this project that include but are not limited to the Information Technology Department, the Division of Homeland Security, the Division of State Radio Communications, the Highway Patrol and the Criminal Justice Information System and the Department of Transportation. We would be willing participants in this project.

We are hopeful that upon successful demonstration of the initial project in North Dakota, the project would extend to other states and a regional implementation would develop quickly. This could and would enhance interoperability with regional states and thereby foster greater emergency response capabilities in North Dakota and other rural states.

This letter is written as a statement of interest and we offer our cooperation as the network and technology is developed. We are interested in continued discussions to develop a public safety network that brings enhanced communications services to rural America. We support New EA's plans to utilize the Public Safety Spectrum (763-768/793-798 MHz) currently licensed by the FCC to the PSST and unlicensed spectrum for a rural based public safety project.

Sincerely,

Ted Rufledt, President

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